



# SEQUENCE LISTING

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Sun, Wei

<120> T Cell Receptor CDR3 Sequence and Methods for  
Detecting and Treating Rheumatoid Arthritis

<130> D6622

<140> US 10/612,468  
<141> 2003-07-02

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in the V(16 family (BV16 gene) of T cell receptors  
(TCR) in patients with rheumatoid arthritis (RA)

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region V(14 of T cell receptors

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Ala Gly Pro Leu Glu Ala Gln Val Thr Gln Asn Pro Arg Tyr Leu
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Ile Thr Val Thr Gly Lys Lys Leu Thr Val Thr Cys Ser Gln Asn
      35      40      45
Met Asn His Glu Tyr Met Ser Trp Tyr Arg Gln Asp Pro Gly Leu
      50      55      60
Gly Leu Arg Gln Ile Tyr Tyr Ser Met Asn Val Glu Val Thr Asp
      65      70      75
Lys Gly Asp Val Pro Glu Gly Tyr Lys Val Ser Arg Lys Glu Lys
      80      85      90
Arg Asn Phe Pro Leu Ile Leu Glu Ser Pro Ser Pro Asn Gln Thr
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Ser Leu Tyr Phe Cys Ala Ser Ser
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<210>      7
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      35      40      45
Phe Leu Leu His Phe Val Lys Glu Ser Lys Gln Asp Glu Ser Gly
      50      55      60
Met Pro Asn Asn Arg Phe Leu Ala Glu Arg Thr Gly Gly Thr Tyr
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      80      85      90
Tyr Phe Cys Ala Ser Ser
      95

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<210> 12  
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PCR analysis

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PCR analysis

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PCR analysis

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<210> 24  
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<210> 25  
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<400> 25  
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<210> 26  
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PCR analysis

<400> 29 atgtgagggc ctggcagact c 21

<210> 30

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<210> 31

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<210> 33

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 PCR analysis

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<210> 74  
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<220>  
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<400> 74  
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<210> 75  
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<220>  
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 Phe Phe Gly Pro Gly  
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<210> 76  
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 cgggccagga 60

<210> 77  
 <211> 20  
 <212> PRT  
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<220>  
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 from ST specimen of RA patients

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 Phe Phe Gly Pro Gly  
                           20

<210> 78  
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 cgggccagga 60

<210> 79  
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 <213> Homo sapiens

<220>  
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 from ST specimen of RA patient

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                           20

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 from ST specimen of RA patients

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 cgggccagga 60

<210> 81  
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 <212> PRT  
 <213> Homo sapiens

<220>  
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 from ST specimen of RA patient

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<220>  
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 cgggccagga 60  
  
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 <223> CDR3 amino acid sequence of BV16 clonotype derived  
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 Phe Phe Gly Pro Gly  
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 cgggccagga 60  
  
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 <213> Homo sapiens  
  
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from ST specimen of RA patient

<400> 85

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<210> 86

<211> 60

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<223> CDR3 nucleic acid sequence of BV16 clonotype derived  
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<210> 87

<211> 20

<212> PRT

<213> Homo sapiens

<220>

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<223> CDR3 amino acid sequence of BV16 clonotype derived  
from ST specimen of RA patient

<400> 87

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Phe Phe Gly Pro Gly  
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<210> 88

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

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<223> CDR3 nucleic acid sequence of BV16 clonotype derived  
from ST specimen of RA patients

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cgggccgggc 60

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from ST specimen of RA patient

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from ST specimen of RA patient

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<210> 93  
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 from ST specimen of RA patient

<400> 93  
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<210> 94  
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cgggccgggc 60

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<213> Homo sapiens

<220>  
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from ST specimen of RA patient

<400> 95  
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Phe Phe Gly Pro Gly  
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<210> 96  
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from ST specimen of RA patients

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cgggccgggc 60

<210> 97  
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from ST specimen of RA patient

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cgggccgggc 60

<210> 99  
<211> 18  
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from ST specimen of RA patient

<400> 99  
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<210> 101  
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<212> PRT  
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 <211> 54  
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 from ST specimen of RA patient  
  
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                                   5                                  10                                  15  
 Gly Gln Gly  
  
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 <211> 54  
 <212> DNA  
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<223> CDR3 nucleic acid sequence of BV16 clonotype derived from ST specimen of RA patients

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**<210> 105**

**<211>      18**

**<212> PRT**

<213> Homo sapiens

**<220>**

<221>      Domain

<223> CDR3 amino acid sequence of BV16 clonotype derived from ST specimen of RA patient

**<400>      105**

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Gly Gln Gly

$\langle 210 \rangle$  106

**<211> 54**

**<212> DNA**

<213> Artificial Sequence

**<220>**

**<221> CDS**

<223> CDR3 nucleic acid sequence of BV16 clonotype derived from ST specimen of RA patients

**<400>            106**

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**<210> 107**

**<211> 18**

<212> PRT

<213> Homo. sapiens

 $\langle 220 \rangle$ 

<221>      Domain

<223> CDR3 amino acid sequence of BV16 clonotype derived from ST specimen of RA patient



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                                   5                                  10                                  15  
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<210> 108  
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<210> 109  
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 from ST specimen of RA patient

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 Gly Gln Gly

<210> 110  
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<400> 110  
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<210> 111  
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<212> PRT  
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from ST specimen of RA patient

<400> 111  
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<210> 112  
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from ST specimen of RA patients

<400> 112  
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<210> 113  
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<213> Homo sapiens

<220>  
<221> Domain  
<223> CDR3 amino acid sequence of BV14 clonotype derived  
from ST specimen of RA patients

<400> 113  
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<210> 114  
<211> 63  
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 cttcggggcca gga 63  
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 <211> 22  
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 <213> Homo sapiens  
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 <223> CDR3 amino acid sequence of BV14 clonotype derived  
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 Glu Gln Phe Phe Gly Pro Gly  
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 <210> 116  
 <211> 63  
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 from ST specimen of RA patients

<400> 117  
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<210> 118  
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<400> 118  
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<210> 119  
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<220>  
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 from ST specimen of RA patients

<400> 119  
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<210> 121  
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<220>  
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<400> 121  
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<210> 122  
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<400> 122  
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<210> 123  
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<220>  
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 from ST specimen of RA patients

<400> 123  
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 Gln Phe Phe Gly Pro Gly  
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<210> 124  
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 from ST specimen of RA patients

<400> 124  
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<210> 125  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<220>  
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 <223> CDR3 amino acid sequence of BV14 clonotype derived  
 from ST specimen of RA patients

<400> 125  
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<210> 126  
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<220>  
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<223> CDR3 nucleic acid sequence of BV14 clonotype derived  
from ST specimen of RA patients

<400> 126  
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<210> 127  
<211> 20  
<212> PRT  
<213> Homo sapiens

<220>  
<221> Domain  
<223> CDR3 amino acid sequence of BV14 clonotype derived  
from ST specimen of RA patients

<400> 127  
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Tyr Phe Gly Pro Gly  
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<210> 128  
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from ST specimen of RA patients

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cgggccagga 60

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from ST specimen of RA patients





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cgggccagga 60

<210> 133  
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from ST specimen of RA patients

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5 10 15  
Tyr Phe Gly Pro Gly  
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from ST specimen of RA patients

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cgggccagga 60

<210> 135  
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from ST specimen of RA patients

<400> 135  
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Tyr Phe Gly Pro Gly  
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from ST specimen of RA patients

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cgggcccagga 60

<210> 137  
<211> 19  
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from ST specimen of RA patients

<400> 137  
Tyr Phe Cys Ala Ser Ser Arg Asp Gly Val Ser Tyr Glu Gln Tyr  
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Phe Gly Pro Gly

<210> 138  
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from ST specimen of RA patients

<400> 138  
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57



<212> DNA  
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 <210> 143  
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 Tyr Phe Gly Pro Gly  
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 Tyr Phe Gly Pro Gly  
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 cgggccagga 60

<210> 147  
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 from ST specimen of RA patients

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 Tyr Phe Gly Pro Gly  
                                   20

<210> 148  
 <211> 61  
 <212> DNA  
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<400> 148  
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<210> 149  
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 from ST specimen of RA patients

<400> 149  
 Tyr Phe Cys Ala Ser Ser Leu Ser Ala Arg Thr Thr Tyr Glu Gln  
 5 10 15  
 Tyr Phe Gly Pro Gly  
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<210> 150  
 <211> 60  
 <212> DNA  
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<400> 150  
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 cgggccagga 60

<210> 151  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

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from ST specimen of RA patients

<400> 151  
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Leu Gly Ser Gly

<210> 152  
<211> 57  
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from ST specimen of RA patients

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<210> 153  
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<212> PRT  
<213> Homo sapiens

<220>  
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from ST specimen of RA patients

<400> 153  
Tyr Phe Cys Ala Ser Ser Leu Ser Gln Glu Thr Glu Ala Phe Phe  
5 10 15  
Gly Gln Gly

<210> 154  
<211> 53  
<212> DNA  
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<220>  
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<223> CDR3 nucleic acid sequence of BV14 clonotype derived  
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<400> 154  
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<210> 155  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
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 <223> CDR3 amino acid sequence of BV14 clonotype derived  
 from ST specimen of RA patients

<400> 155  
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 Phe Gly Ser Gly

<210> 156  
 <211> 54  
 <212> DNA  
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 <221> CDS  
 <223> CDR3 nucleic acid sequence of BV14 clonotype derived  
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